

REMARKS

The Examiner's careful review and examination of the subject application are noted and appreciated. Applicants' representative respectfully thanks Examiner for the telephone interview on Friday May 19, 2006.

The present invention relates to a valve assembly comprising a housing having one or more entrance ports through which fluid enters the valve assembly and one or more exit ports through which fluid exits the valve assembly, the one or more entrance ports and said one or more exit ports being in fluid communication via a chamber extending from the one or more entrance ports to the one or more exit ports within the housing, a plug disposed within the chamber in a normally open position, the plug including a plurality of longitudinal flow channels, each of the longitudinal flow channels allowing continuous fluid flow through the plug regardless of the position of said plug within said housing, and a translating member in mechanical communication with the plug, the translating member biasing said plug in the direction of said one or more entrance ports, the plug and the translating member cooperating to provide a flow resistance actuated by the force exerted on the plug in the direction of the one or more exit ports by fluid entering the valve assembly such that the flow resistance increases with increased force exerted on the plug.

Applicants have carefully reviewed the above-identified Office

Action. Applicants contend that, in view of the clarifying remarks set forth herein, all bases of objection and rejection have been overcome. Accordingly, Applicants respectfully request withdrawal of the pending rejections and allowance of the claims submitted.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

For the reasons which follow hereinafter, the rejection of claims 1-4 under 35 U.S.C. §102 as being anticipated by Griinke (U.S. Pat. No. 5,085,246) has been obviated by appropriate amendment and should be withdrawn.

Griinke discloses a plural rate surge suppressing valve (Title). The valve includes a movable valve member having first flow passage means and second flow passage means. The first flow passage means comprise substantially cylindrical passages or tubular apertures which allow flow through the moveable valve member. The first flow means are closed upon the valve member mating with the valve seat. The second flow passage means comprise a tubular aperture centrally located in the moveable valve member. (See col. 3, lines 16-36).

In contrast, the presently pending invention claims a valve assembly comprising a housing having one or more entrance ports through which fluid enters the valve assembly and one or more exit ports through which fluid exits the valve assembly, the one or more entrance ports and said one or more exit ports being in fluid

communication via a chamber extending from the one or more entrance ports to the one or more exit ports within the housing, a plug disposed within the chamber in a normally open position, the plug including a plurality of longitudinal flow channels, each of the longitudinal flow channels allowing continuous fluid flow through the plug regardless of the position of said plug within said housing. Griinke do not disclose a valve as presently claimed. The valve disclosed by Griinke does not provide for continuous flow through each of the passages in the moveable valve member (i.e. plug). By not providing for a continuous flow, the valve disclosed by Griinke could provide for a high gas flow rate upon the opening of the passages which will cause overheating in metal hydride storage vessels. As such, the presently pending invention is readily distinguishable and clearly patentable over the cited reference and the rejection should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

For the reasons which follow hereinafter, the rejection of claims 5-9 under 35 U.S.C. §103 as being unpatentable over Kelley et al (U.S. Pat. Pub. No. 2002/0100682) in view of Griinke has been obviated by appropriate amendment and should be withdrawn.

Griinke teaches a plural rate surge suppressing valve (Title). The valve includes a movable valve member having first flow passage means and second flow passage means. The first flow passage means

comprise substantially cylindrical passages or tubular apertures which allow flow through the moveable valve member. The first flow means are closed upon the valve member mating with the valve seat. The second flow passage means comprise a tubular aperture centrally located in the moveable valve member. (See col. 3, lines 16-36).

Kelley et al. teaches a hydrogen recharging system for fuel cell hydride storage reservoir (Title). The hydrogen recharging system comprises a water reservoir, an electrolyzer, and a hydride canister. Water from the electrolyzer is supplied to the electrolyzer which produces hydrogen via electrolysis of water. The hydrogen is dried, compressed and supplied to a hydride canister where the hydrogen is stored in metal hydride form.


In contrast, the presently pending invention claims a valve assembly comprising a housing having one or more entrance ports through which fluid enters the valve assembly and one or more exit ports through which fluid exits the valve assembly, the one or more entrance ports and said one or more exit ports being in fluid communication via a chamber extending from the one or more entrance ports to the one or more exit ports within the housing, a plug disposed within the chamber in a normally open position, the plug including a plurality of longitudinal flow channels, each of the longitudinal flow channels allowing continuous fluid flow through the plug regardless of the position of said plug within said housing. Griinke or Kelley et al. alone or in combination do not

teach a valve assembly as presently claimed. The valve taught by Griinke does not provide for continuous flow through each of the passages in the moveable valve member (i.e. plug). By not providing for a continuous flow, the valve disclosed by Griinke could provide for a high gas flow rate upon the opening of the passages which will cause overheating in metal hydride storage vessels. As such, the presently pending invention claims subject matter neither shown nor obvious over the cited reference and therefore Applicants respectfully request that the pending rejection be withdrawn.

Accordingly, Applicant submits that the present amendment places the application in condition for allowance. The Examiner is respectfully requested to pass the application to issuance.

The Examiner is respectfully invited to call the Applicants' representative should it be deemed beneficial to further advance prosecution of the application.

Respectfully submitted,


Frederick W. Mau II
Reg. No 52,453

Date: May 31, 2006
Energy Conversion Devices, Inc.
2596 Waterview Drive
Rochester Hills, MI 48309
Tel. (248) 293-0440
Fax. (248) 844-2273
e-mail: fmau@ovonic.com